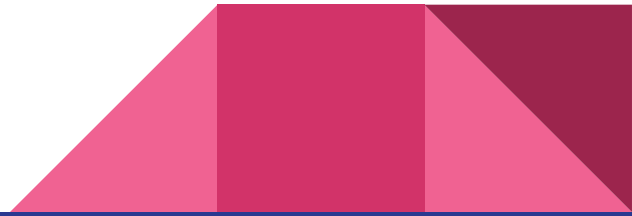
SKIOVOX exploit for ChromeOS

Exploit originally found by @AkaNotNice
Exploit expanded by @Bypassi
Guide written by @Bypassi

What is it?

An exploit that allows for browsing within a completely unblocked Chrome browser. It works on ChromeOS 118 and a wide range of previous versions.

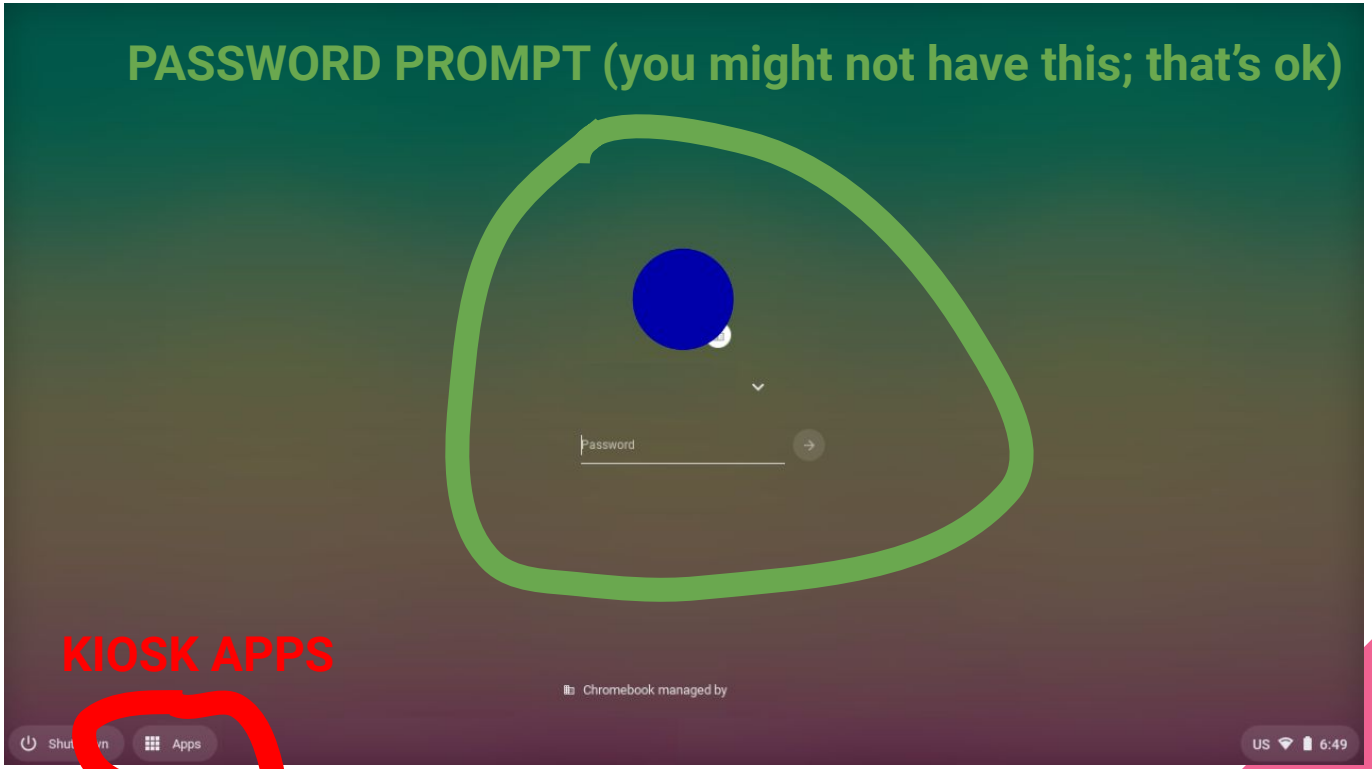
- Skiovox utilizes a bug in kiosk apps
- Very similar to a bug from 3 years ago



Kiosk apps

- A district-controlled app available from the login screen
- Most districts use them for standardized tests

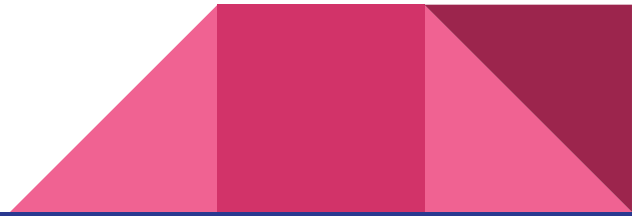
The login screen anatomy



Disclaimer

This exploit may not work for you! **I do not care,** so please don’t bother me.

It’s also possible that it may be patched by the time you try it. I do not plan on updating these instructions.



Stage 1

Starting the exploit

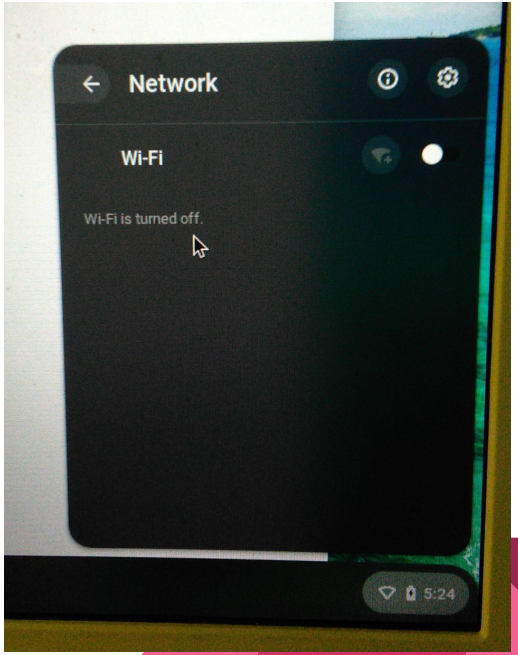
Step 1.1

First, sign out or restart your Chromebook to get to the login screen.

Then, turn **off** your Wi-Fi using the control panel in the bottom right.

Don’t forget or disconnect from any networks, just turn it off completely.

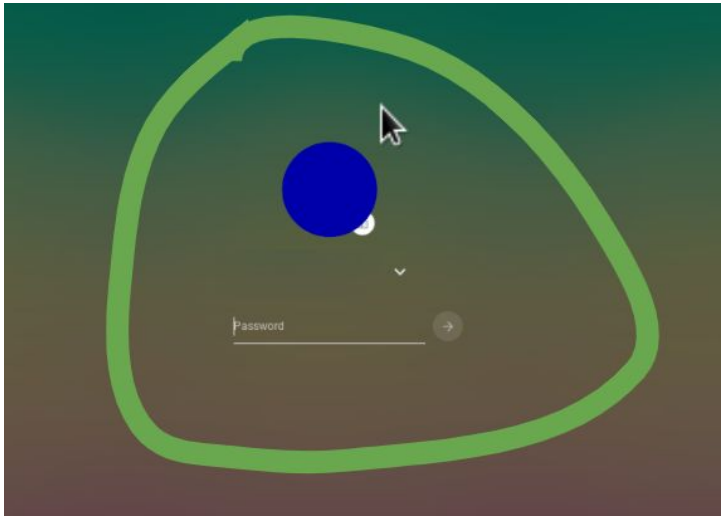
This may not work while at school.



Step 1.2

If you have a password input like the one in the image, type in your password but **do not** press enter.

If you don’t have one, you can skip this step.



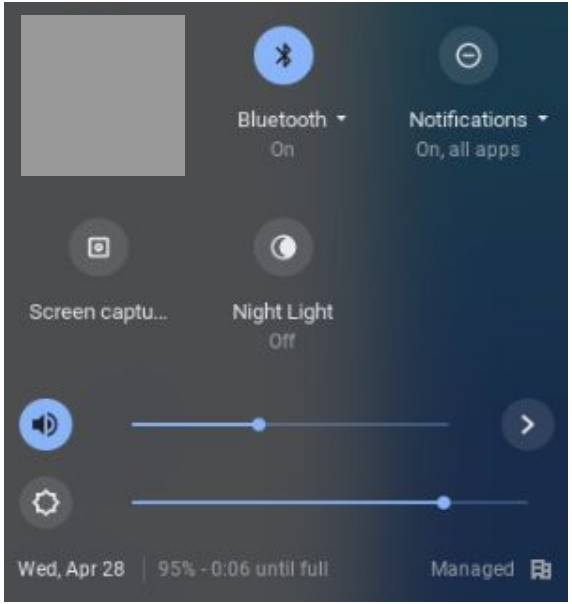
Step 1.3

Click on one of the apps in the “apps” section.

- Most of them work with this exploit
- Use the same app every time to save data

Instantly after you click on the app, run [alt+shift+s].
If you did it fast enough,
a toolbar should appear.

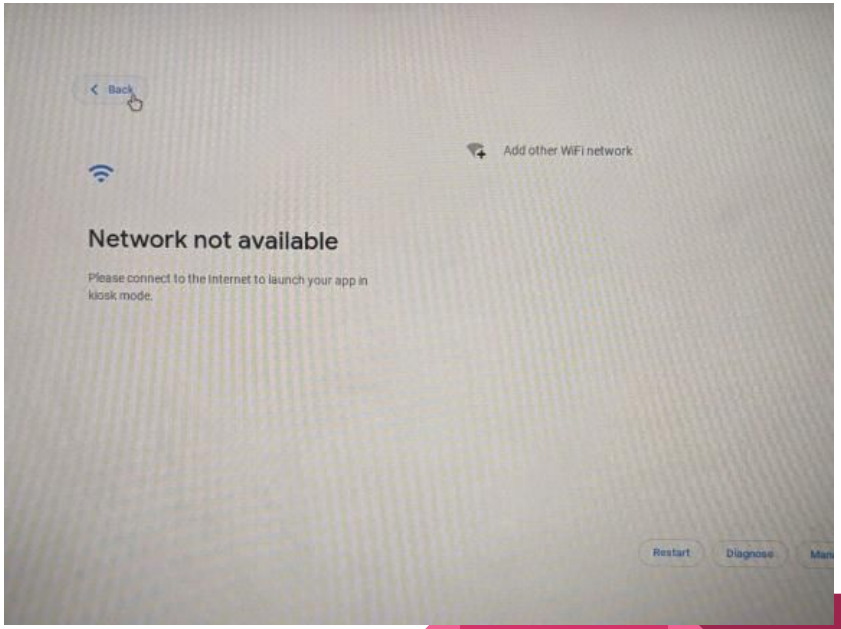
If it didn’t, restart the steps.



This should show up

Step 1.4

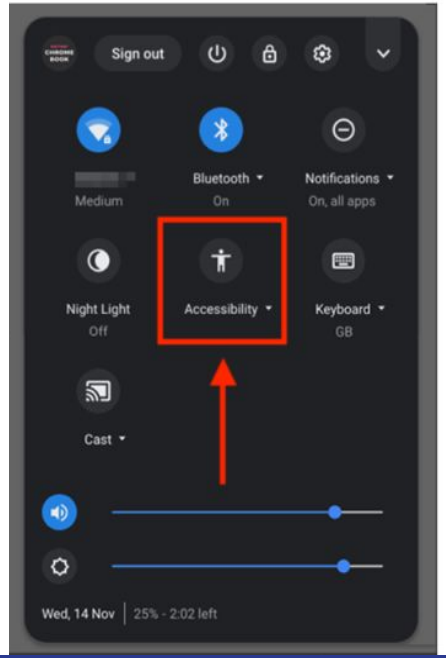
Wait until you get a “network unavailable” screen.

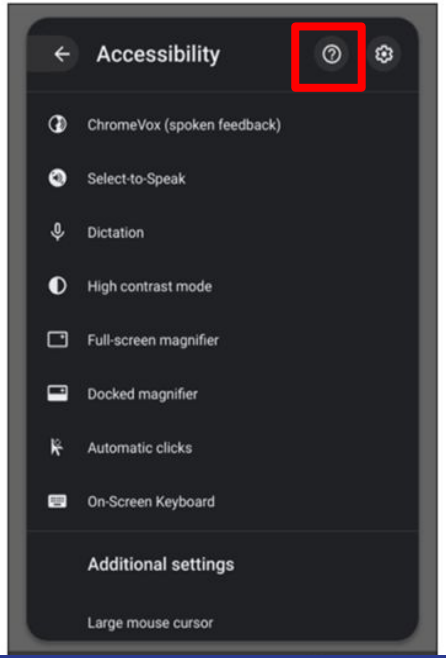


Step 1.5

The toolbar should still be open. Click accessibility, then click the question mark. The toolbar will now close.

If you couldn't do this step, try again with another app.





Next...

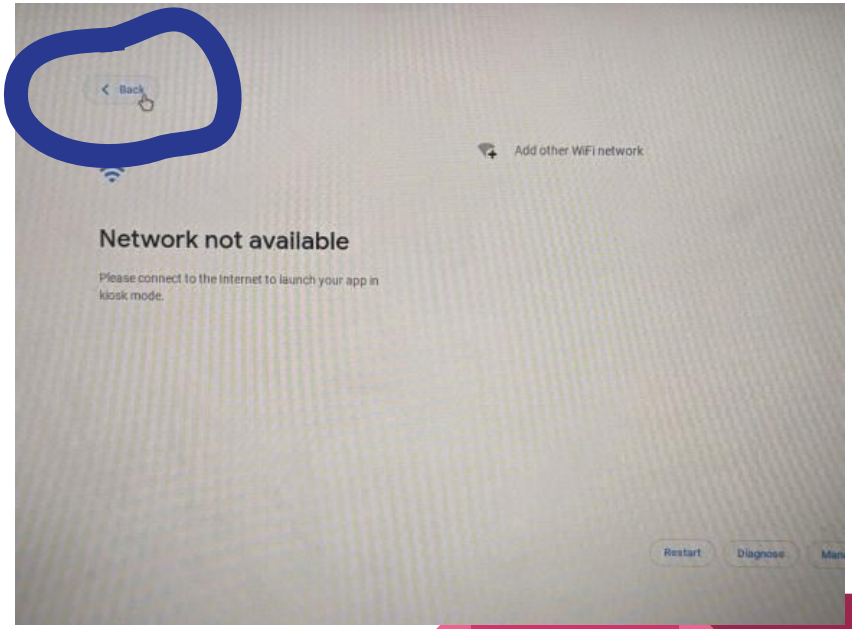
If you see a “back” button on the network error page:

- **Go to stage 2A**

Otherwise:

- **Go to stage 2B**

They have different steps!



Stage 2A

For users with a back button

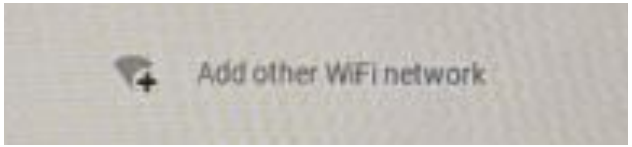
Note

You should have already typed in your password (step 1.2) by the time you’re here.

Remember that the steps in stage 2A are only for users who see a back button on the network error page.

Step 2A.1

Click “add other WiFi network”.



Don’t type anything in.

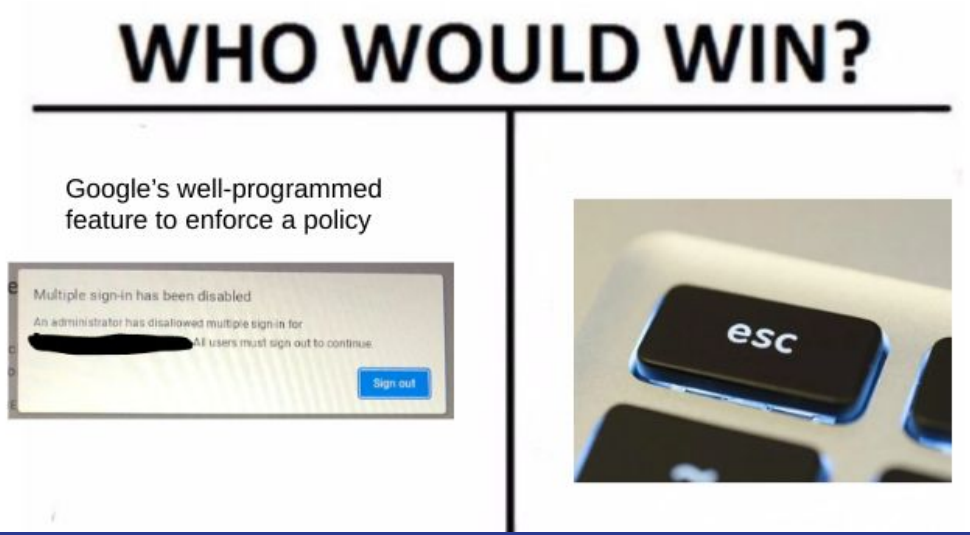
Instead, immediately:

- **Press the escape key twice**, which should bring you to the login screen with your password still typed in
- **Press enter** to log in

These steps must be done within ~4 seconds after pressing the “add network” button.

Step 2A.2

You may see a screen saying “multiple sign-in is disabled.” If you get this, simply press the escape key on your keyboard to bypass it.


WHO WOULD WIN?
Google’s well-programmed feature to enforce a policy
Multiple sign-in has been disabled
An administrator has disallowed multiple sign-in for
[redacted]
All users must sign out to continue.
Sign out
esc

Step 2A.3

There may be an open window belonging to your school profile. This window will have your filter extensions installed.

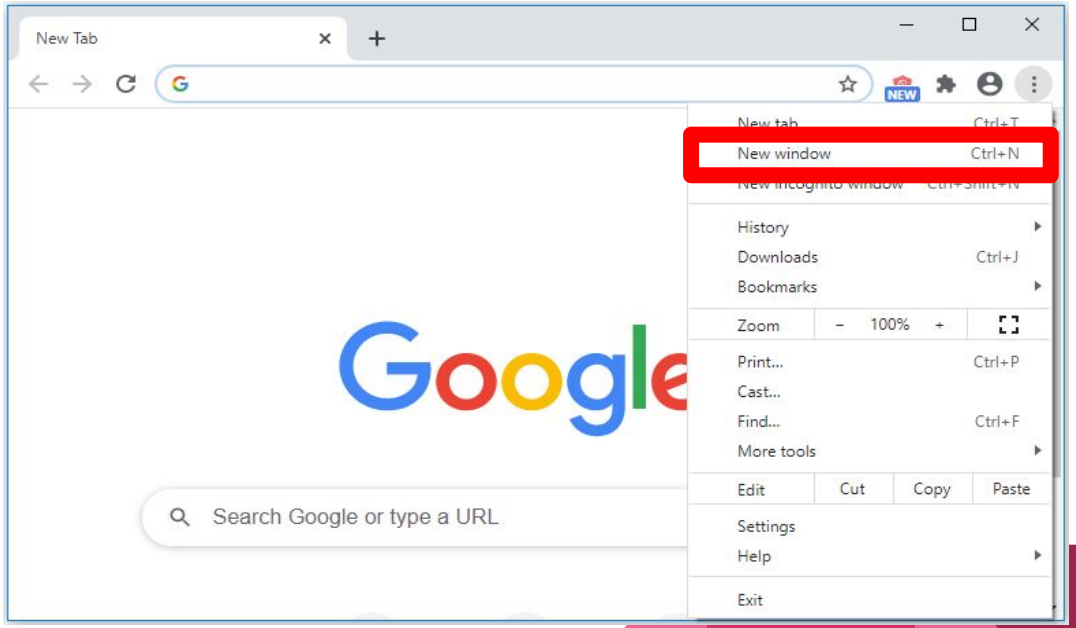
Close this window if you like. There should be another one behind it.

Step 2A.4

You should be able to see a window with no managed extensions installed.

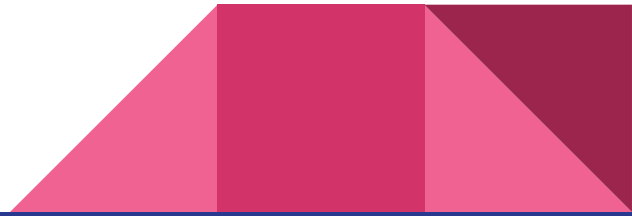
This window is slightly bugged. To fix this, click the three dots in the upper right corner of Chrome and select “new window”.

Use this window instead.



Next…

If this is your first time setting up the exploit, do Stage 3. Otherwise, you’re done.



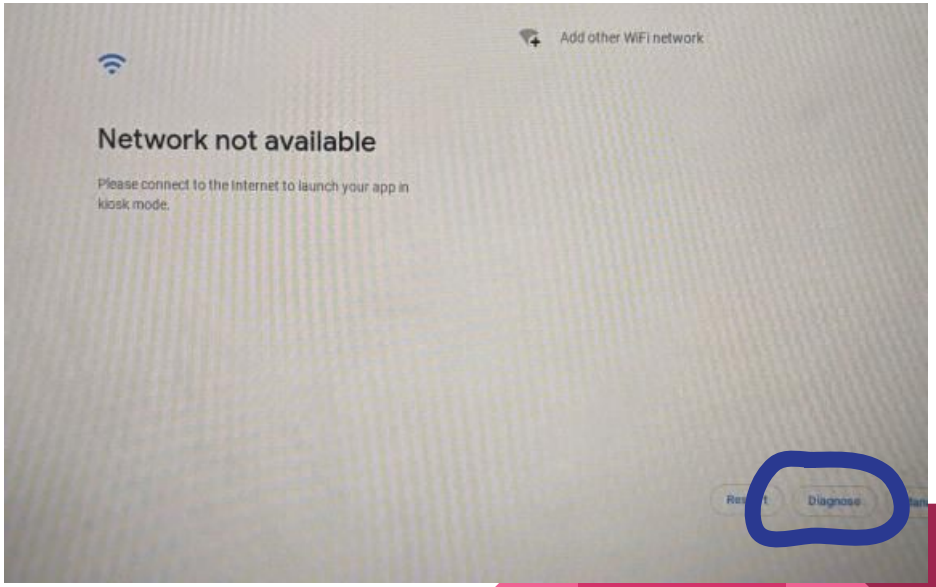
Stage 2B

For users without a back button

Step 2B.1

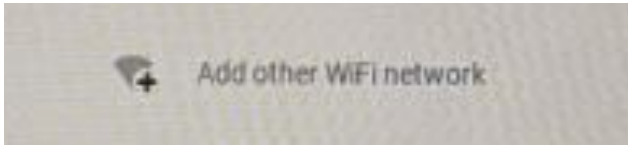
Press the “diagnose” button.

The diagnostics window will now open, although you shouldn’t be able to see it.



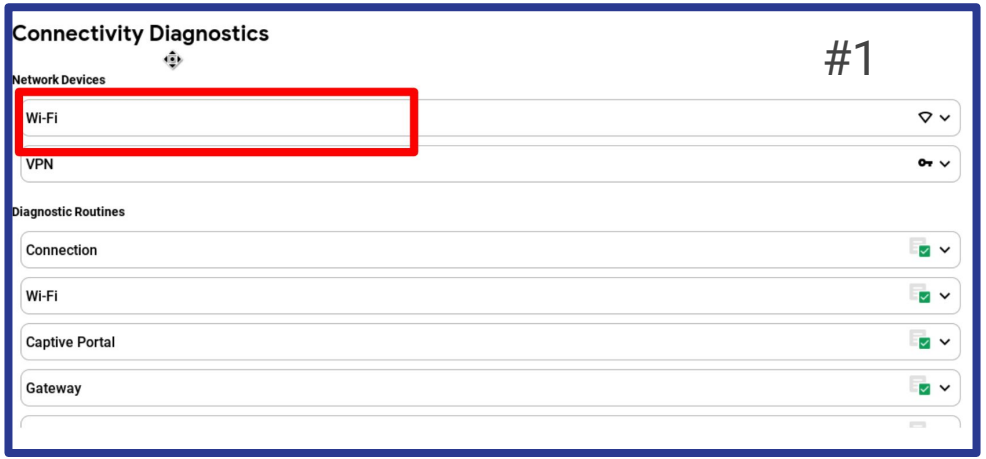
Step 2B.2

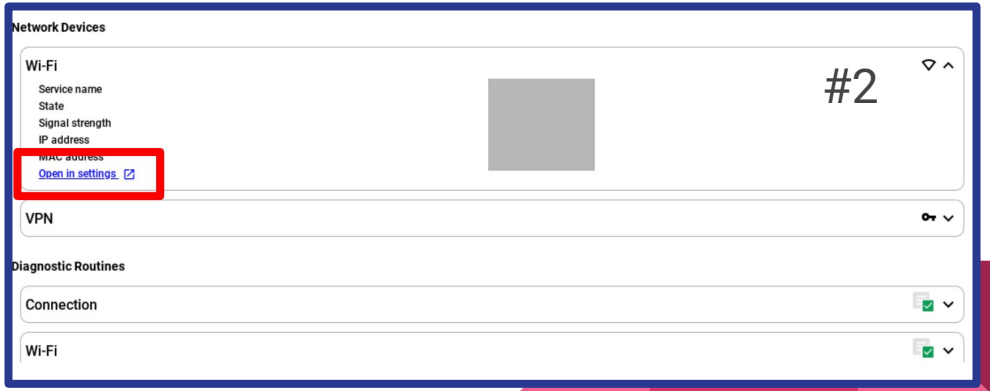
Click “add other WiFi network” to turn your WiFi back on. Don’t type anything in, just wait until the diagnostics page shows up.



Step 2B.3

Click WiFi, then click the settings link. Settings should now open.

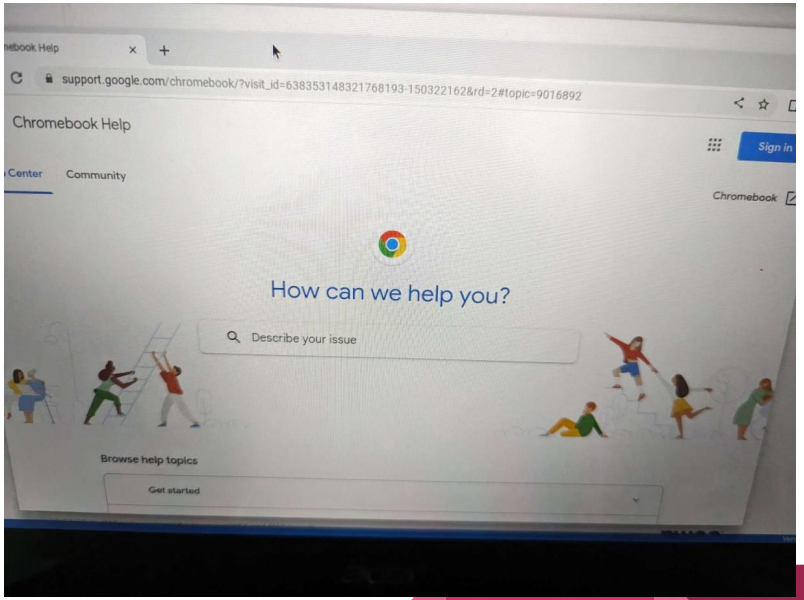




Step 2B.4

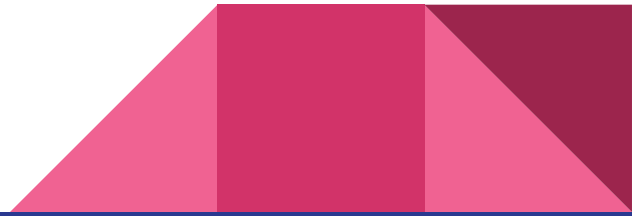
Close the settings window. There's nothing useful that you can do from device settings, as device policies still apply.

Once you've closed it, you should be focused on a Chrome window. This window shouldn't have any of your district's extensions installed.



Next…

If this is your first time setting up the exploit, do Stage 3. Otherwise, you’re done.



Stage 3

Making the experience smoother

Issues with this exploit

- It’s unclear how to add a Google account and install extensions
- Most keyboard shortcuts don’t work
- It’s hard to move or resize the window(s)

-

The solution

The **Skiovox Helper** extension restores all of this functionality:

https://github.com/bypassiwastaken/skiovox-helper

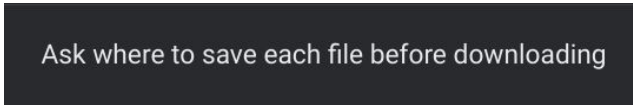
In this section, I'll explain how to install it.

Step 3.1

A zip file of the extension is available on the releases in our GitHub. Feel free to host this file yourself.

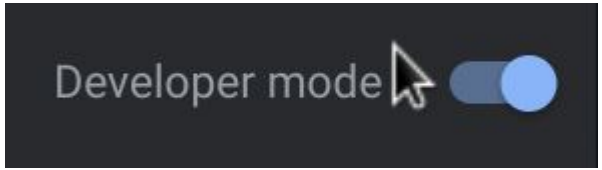
Find a way to **download this zip file** in your unblocked browser.

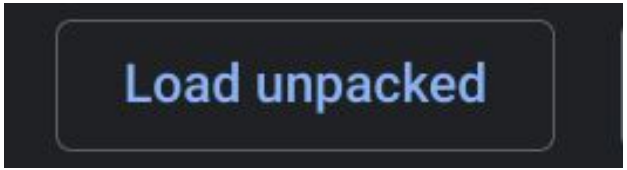
If you got here from stage 2A, make sure the following settings in chrome://settings/downloads is turned **off**:



Step 3.2

- Go to chrome://extensions
- Ensure that the developer mode switch in the top right is turned on
- Click “load unpacked”
- A file prompt should now appear



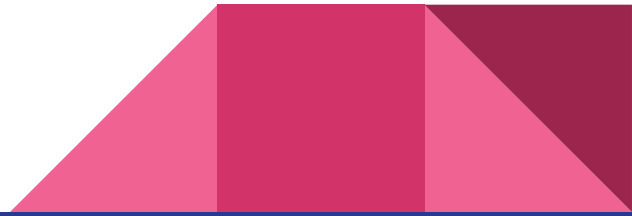


If you don’t get a file upload dialog, make sure you didn’t skip step 2A.4.

Step 3.3

- Find the zip file from step 3.1 in your Downloads section
- Right-click it and press “extract all”
- Double-click the newly created folder (until you see manifest.json)
- Press “open”

The extension should now install.



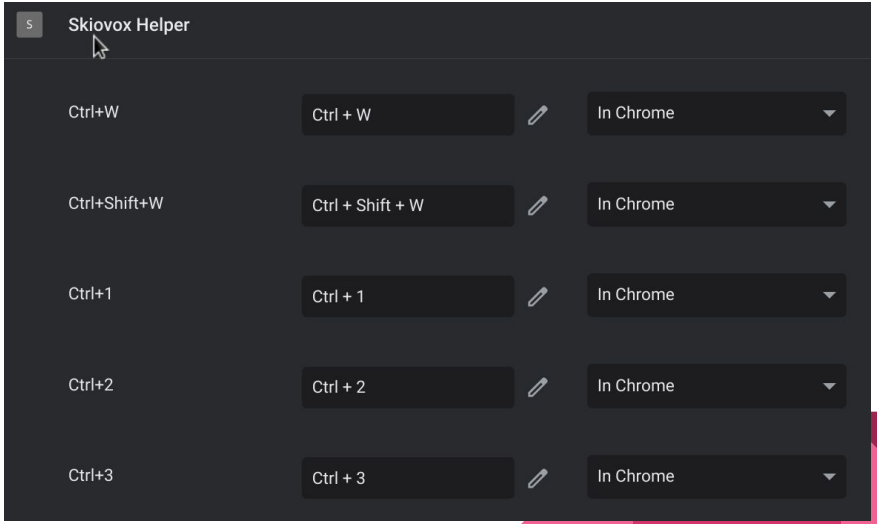
Step 3.4

Upon the first install, the extension will open a page where you can configure your browser shortcuts.

For each shortcut shown:

- Press the edit icon
- Type the command shown in the caption

You can now use most Chrome commands (ctrl+T, ctrl+W, etc)

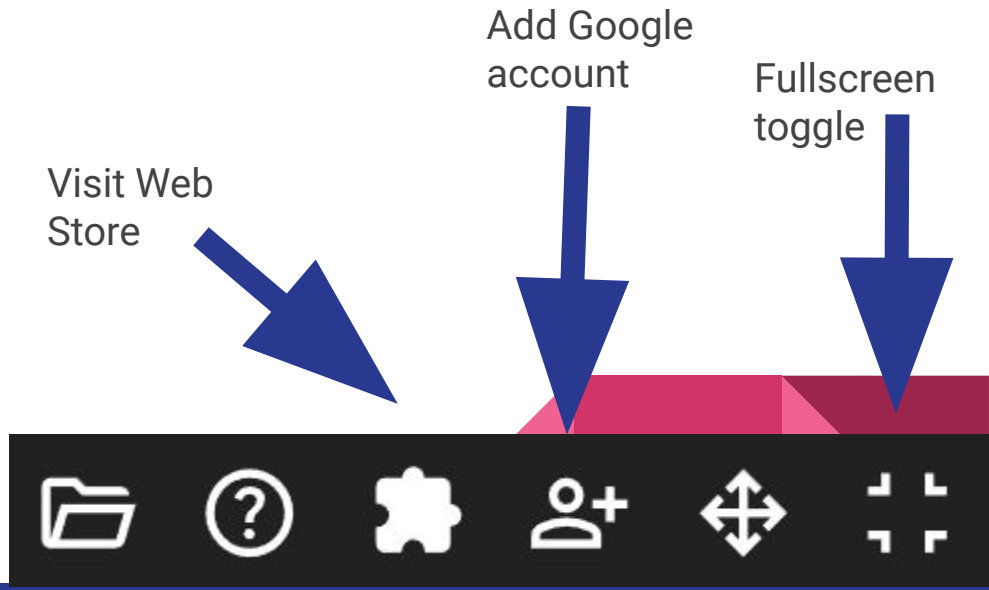


Step 3.5

The Skiovox Helper replaces the new tab page. **Open a new tab** to see its main menu. Try playing around with the buttons in the top right.

The web store only works on recent ChromeOS versions.

You can use it to install VPN extensions that bypass your school's internet filtering.



Other notes

The main difference between stage 2A and 2B is:

- 2A can open multiple windows
- 2B can not

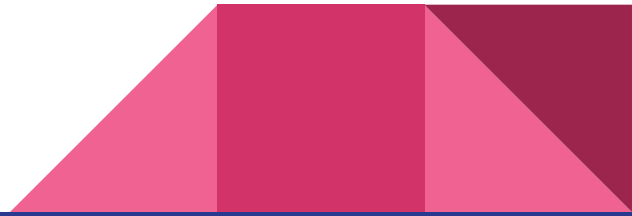
If your screen keeps falling asleep after five seconds, try using another kiosk app.

Every app has its own extensions, history, settings, etc.

Exiting the exploit

To exit the exploit, either:

- Hold down on your power button (and sign out)
- Type “chrome:quit” into a new tab



That’s all!

Exploit originally found by @AkaNotNice
Exploit expanded by @Bypassi